



Dobson, E., Patel, P., & Neville, P. (2019). Perceptions of e-professionalism among dental students: A UK dental school study. *British Dental Journal*, 226(1), 73-78. [266].
<https://doi.org/10.1038/sj.bdj.2019.11>

Peer reviewed version

Link to published version (if available):
[10.1038/sj.bdj.2019.11](https://doi.org/10.1038/sj.bdj.2019.11)

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Perceptions of e-professionalism among dental students: a UK dental school study

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Abstract

Introduction: The social media activity of some healthcare students has created doubt about their ability to uphold and defend the ethical principles of healthcare in their online behaviours. A lot of research has been conducted on the online behaviours of medical and allied health professional students, however, less has been undertaken on dental students.

Aims: Its aim was to determine whether students were aware of the guidelines set by the General Dental Council (GDC) regarding social media and whether they believed they were being professional in their online activities.

Methods and materials: Eighty-eight dental students (46 from year 2; 42 from year 4) at one UK dental school completed a questionnaire study examining their attitude towards and perceptions of e-professionalism.

Results: The results show that most students were heavy users of social media with an awareness of social media guidelines set out by the GDC. However, student responses to various e-professionalism scenarios reveals disagreement on whether posts referring to alcohol and work colleagues were deemed unprofessional.

Conclusion: Student perceptions of and attitudes towards e-professionalism is complicated and contradictory. More research will need to be undertaken to explore how we can inculcate e-professional values and behaviours in dental professionalism teaching.

3 in-brief points

- The ubiquity of social media means that it is an inescapable aspect of everyday life and has a direct bearing on professional practice and reputation.
- All students underestimated how accessible they are to the public because of what they post online.
- Though students have an awareness of GDC social media guidelines, their interpretation of whether it is professional to be implicated in online posts and photos that involve alcohol and work-related updates was ambivalent.

Introduction

Social media are a range of online platforms that enables unprecedented interactive communication between a range of audiences.¹ These internet channels or platforms include social networking sites such as Facebook and Whats App and micro blogs such as Twitter and Instagram. This technology has paved the way for some fundamental changes in the delivery and organisation of healthcare. From the clinicians perspective, social media allows researchers and practitioners to share and disseminate research with funders, fellow researchers and the public.² Social media can increase access to local health authorities through advertisement of services.³ Social media has also impacted on the patient illness experience, providing a form of online support and information for patients,⁴ and as a vehicle for health promotion.⁵

Unfortunately, the social media activity of some healthcare students and practitioners has also resulted in unanticipated ethical consequences. Many studies have found online examples of healthcare students who have posted images of intoxication and illicit drug use,⁶ written posts that breach patient confidentiality,⁷ conducted an online relationship with patients,⁸ and have written disrespectful comments about colleagues and employers⁹⁻¹⁰ on various social media platforms. Understandably, there has been increased interest in how healthcare students behave online, and how this technology may be challenging existing professional standards. This has resulted in a new area of study, e-professionalism. E-professionalism is defined by Cain and Rommanelli¹¹ as “the attitudes and behaviors (some of which may occur in private settings) reflecting traditional professionalism paradigms that are manifested through digital media” (p. 67). In 2013, the General Dental Council (GDC) first created guidance on the use of social media sites. These guidelines were updated in June 2016.¹²

The adverse effects of social media on healthcare professionalism has attracted much interest.¹³⁻¹⁴ In fact, there is an ongoing debate within the BJD on the impact and significance of social media on dentistry and dental professionalism.¹⁵⁻²¹ While a lot of research has been conducted on the online behaviours of medical and allied health professional students (see above), less has been undertaken on dental students, except for Kenny and Johnson²² and Nason et al.²³ Mindful of this gap in our knowledge, this research was conducted to explore the social media habits of dental students and their views on e-professionalism. Its aim was to determine whether students were aware of the standards set by the GDC regarding social media and whether they believed they were being professional in their online activities. In this way, this study hoped to add to our limited knowledge of undergraduate dental student’s perceptions of e-professionalism and the challenges they, their educators and the profession itself may face because of this communication technology.

Materials and Methods

The study was approved by the Faculty of Health Sciences Ethics Committee (Ref ID: 33141) and was conducted from March to April 2016.

A paper and pen questionnaire was designed and distributed among Year 2(n=63) and Year 4(n=68) dental students in April 2016 in a UK university (Bristol Dental School). The study was interested in investigating the differences and similarities between Year 2 and Year 4 students perceptions of social media and whether clinical experience had an impact on their social media knowledge, perception and behaviours.

The survey instrument was developed in response to issues raised by the literature review. The questionnaire contained four sections: patterns of social media use, student perceptions of e-professionalism, the accessibility/security of their social media profile, and demographic data.

Section 1 of the questionnaire contained questions with closed response category answers on the popular form of social media accessed, frequency of social media usage, the devices used to access social media and the reasons for using social media. Two closed questions invited respondents to respond (yes or no) if they knew what e-professionalism was and if they were aware of the GDC guidelines. Respondents were also presented with 21 item list of statements outlining a range of professional and unprofessional online behaviour for student(e.g. "Pictures involving you in the company of others who are under the influence of alcohol") to rate in accordance with a 5 point Likert scale(e.g. "not at all professional", "not really professional", "satisfactory", "quite professional" and "very professional"). Section 3 contained 8 closed questions, inviting respondents to respond (yes/no closed response categories) to the accessibility of their social media profiles from a security and protection perspective(e.g. "Are you aware of your current privacy settings on your chosen social media sites?" and "Do you Google yourself regularly to make sure your privacy settings are secure?"). The final part of the questionnaire contained demographic details of the respondents. The questionnaire was piloted for relevance and face validity prior to distribution.

Data from the questionnaires was hand entered into IBM SPSS statistics. For section 1 of the questionnaire, patterns of social media use, and section 4 - demographics, data was analysed descriptively, showing the frequencies of respondents from year 2 and year 4 for each question. For section 2 and 3, to compare the responses of year 2 and 4, a Pearson's chi-squared test was run for each question to produce a P value to state whether there was a statistically significant difference ($p < 0.05$) between years.

Results

Participants

88 students responded to the questionnaire: 46 from year 2 and 42 from year 4. This resulted in a response rate of 73% for Year 2 and 62% for year 4. Most respondents were female (81%) and between the ages of 18-23 (93%).

Patterns of social media use

The most popular form of social media used across both year groups was Facebook (98% of total respondents) (see Table 1). Only 7 respondents ticked 'other' forms of social media. Examples of these were WhatsApp (2 respondents) and dating apps such as Tinder (3 respondents). 98% of students used their mobile phones to check social media, followed by laptops (81%). The majority of students described themselves as 'heavy users' and 'moderate users' of social media (36% and 34% respectively). Overall, 50% of respondents said they checked their social media sites 6+ times a day.

Student perceptions of e-professionalism

Students were asked whether they had heard of e-professionalism and the GDC guidelines on social media. No significant difference between student's awareness of e-professionalism was found between year 2 and year 4 students, however there was a statistically significant difference between year 2 and 4 regarding their awareness of the GDC guidelines ($P = 0.007$). (see table 2)

The second part of this section invited students to assess several scenarios in terms of their being examples of unprofessional, satisfactory or professional behaviour. The results are shown in Table 3. P values are presented in the table to state whether there is a significant difference between year 2 and year 4 regarding their responses to each scenario.

All respondents from both years believed it to be unsatisfactory to reference illegal substances in photos or statuses and to discuss staff or patients in statuses and comments on their social media. There was a significant difference between year 2 and year 4 regarding photos of yourself at work and photos of staff on social media ($p = 0.014$ and 0.012 respectively). There was a significant difference between year 2 and 4 for the scenario 'pictures involving yourself under the influence of alcohol', with all year 2 respondents answering 'unsatisfactory' but 5 year 4 students answering 'satisfactory'.

Public access to social media

Section 3 of the questionnaire was concerned with the respondent's awareness of their own privacy settings and professionalism on social media (see Table 4).

No significant difference was found between years 2 and 4 regarding public access to their social media profiles, and photos/statuses they may not want an employer to see. A significant difference ($p = 0.05$) was found for the question 'has a patient ever found you on social media?'

Students who answered yes to the questions 'Do you have any photos on social media you wouldn't want a patient or employer to see?' and 'Do you have any statuses on social media you wouldn't want a patient or employer to see?' were asked to explain further. Some examples of these were 'Bikini photos from holiday' and 'photos from nights with alcohol'. Students were also asked to explain further if they answered yes to the question 'Has a patient ever found you on social media?' One example of this was found when a student had been sent a friend request three times by a patient, a request denied by the student every time. A further instance was recorded where a student saw a patient searching them on Facebook whilst they were nursing for this patient at the time.

Discussion

The results show that most students were heavy users of social media with half of the respondents checking their social media more than 6 times a day. Facebook was the most popular social media platform used. These findings are in keeping with other studies documenting the social media habits of current medical and dental undergraduates.^{22 24} It also reflects the global popularity of Facebook in contemporary society²⁵ and confirms that fact that the majority of students responding to this questionnaire (82/86) were between the ages of 18-23 and can be considered to be part of the "Z generation" the first generation born into social media.²⁶

At first glance, the student's awareness of e-professionalism would appear to be satisfactory, with 69.6%($n=32$) of year 2 students and 66.7%($n=28$) of year 4 students stating that they know what e-professionalism means. However, when asked specifically about their knowledge of GDC guidelines, the response differs, with 54.4% of the year 2 students claiming awareness of the guidelines compared to 26.2%($n=11$) of the year 4s. This discrepancy can be attributed to the fact that all year 2 students receive training on GDC social media guidelines. However, this finding would suggest that it would be worthwhile repeating or revisiting these guidelines as they progress through subsequent years.

Mindful of the fact that professionalism is situational²⁷ students were invited to respond to a list of real-world situations to test their understanding and application of e-professionalism in these contexts. The list of one-line scenarios (see Table 3) were developed in response to literature review of the topic of social media habits of undergraduate students. Overall, there was consensus across both year groups on what constituted acceptable and unacceptable behaviour online. Some

scenarios attracted unanimous agreement, whereas others showed more variation. Topics where there was consensus across both year groups were: photographs where they are consuming alcohol, sexually provocative pictures of self and when in the company of others, and any online references to their being associated with illicit substances. There was agreement among the participants that it was not professional to share status updates or posts about staff/employers, colleagues and patients. There was also strong agreement across both years that it was unprofessional to share photos of staff and patients. It was considered professional not to accept friend requests from patients and not allowing photos of themselves be posted without their permission.

Agreement was less strong when students considered situations involving a personal photo where they are in the company of others using alcohol, a photo of them driving with/in the company of alcohol, and photographs of them in uniform, in work and of work colleagues. Why might the student be less certain about their perceived professionalism in these examples? There are two possible issues at work here. First, regarding the alcohol issue, students recognise that alcohol is only considered unprofessional when it is being directly consumed, and not while in the company of others consuming alcohol. Such a distinction gives us a useful insight into the ethical worldview of students. However, social media and the public may assume guilt by association. In fact, such is the multiplatform, multi-media nature of social media that social media users often relies on one or two fleeting items to inform their perception of the individual.²⁸ As a result, even if the public only see these photos of sociable drinking they may assume and conclude (falsely) that this person is drunk and so being unprofessional. This viewpoint has been confirmed by Jain et al who found that the public were more critical in their perception of the professionalism of students than faculty when presented with examples of online unprofessionalism.²⁹

Second, we can attribute the uncertainty about the work-related photos as evidence of a clash between the expressive nature of social media and the phenomenon of 'context collapse'.³⁰ Context collapse is a sociological term coined to refer to the ways in the which online communications can feel like an alternative space to everyday life/reality. This 'other' sense of place encourages some people to say or write things online which they won't do in the real/offline world. For others, this online world feels like a space removed from 'reality' with no real-world or off-line significance, meaning or impact. This blurring between and occasional conflict between the 'real-world' and online reality is called 'context collapse' and could be at play here. For instance, it is widespread practice for the z generation to use social media as a vehicle for self-expression, using its multi-media format to storyboard or record their everyday life experiences, interactions and thoughts. As a result, it is commonplace for social media users to share photos of their day to day life online. However, because social media has become an unquestioned way of interacting with others, they may feel like the online world is 'their private world' and not of interest to or concern for others. Therefore, photographs of them in social settings in the company of alcohol might not necessarily register as an issue for their professionalism, but rather a reflection of their private lives. Relatedly, the participants felt that their profile did not contain any discriminating or unfavourable posts or statuses, from the point of view of an employer or patient (95.5% Yr 2, 92.9% Yr 4). However, as this study is based on self-reported data, we are not able to determine if their digital footprint is in fact largely professional as per the GDC guidelines.

Research also suggests that students have a preconceived idea of what is considered acceptable or unacceptable e-professionalism. Studies suggest that there is a broad level agreement that core ethical violations, evidence of alcohol and drug use and profane messages are unacceptable.^{31 32} Nevertheless, there was divergence among student cohorts on whether sexually suggestive material, content that contained alcohol references or use of alcohol or disparaging comments about

colleagues were considered 'unprofessional' and unacceptable.³³ Likewise, while students self-report a knowledge of social media guidelines or a shared consensus on what constitutes unprofessional behaviour online, they admit to having unprofessional content on their social media platforms, defined as material they would not like an employer or patient to see (4.4%(2/45) in yr 2, 7.1% (3/42) in Yr 4). This ambivalence is also reflected in the literature,^{34 35} however, it has not been explored further.

In terms of online security and protection, the majority said they were aware of their online privacy settings and employed a strategy to ensure that this was maintained, for instance, by ensuring that patients never had access to their photos or online status. Again, there was a level of discrepancy in their feedback. The participants did not actively monitor their online presence with the majority saying that they don't google themselves regularly to ensure that their online privacy is being maintained (71.1%(32/45) in Yr 2, 85%(34/40) in Yr 4). Again, this study confirms another interesting trend in the online behaviours of healthcare students where students underestimate how accessible they are to an inquisitive and digitally savvy public. Walton et al.³⁶ found that 79.6% of final year medical students at a Canadian university could be found online, with 36.8% found using only a simple search of their name and university. In addition, 23% of the sample had a large number of publicly accessible photographs. The lack of self-awareness and self-regulation reveals a certain cavalier approach to their online security and fails to take into consideration that online security setting need to be reviewed and updated regularly.

These tension points about the use of social media raise interesting questions for professional healthcare students, professional education and the profession. It suggests that a gap exists between current and established generation of dental students and begs the question, can dental students develop a more critical view of their social media behaviours with more experience and exposure to professional norms and practice, or, should professional programmes teach and instruct them to problematise that which they have come to accept as norm? Research supports the view that it is worthwhile teaching student about online professionalism and how they can remain vigilant regarding their online presence.³⁷

Limitations

Most studies investigating the social media habits of healthcare professional students are single site studies, like this study. As a result, this research method is representative of the research conducted in the topic. Nevertheless, it is worth noting that this study examining the perception of e-professionalism of one dental school in the UK is small scale, compared to Kenny and Johnson²² study. The relatively small size of participants in this study also raises a question about the generalisability of their findings. To overcome this limitation, it might be worthwhile conducting similar research across a number of different institutions in the UK, or even internationally, like O'Sullivan et al.³⁸ Similarly, this study relied on self-reported data so there is the potential for errors or subjective bias in their responses.

Conclusions

The professionalism of undergraduate dental student has been a perennial issue and concern: whether their "set of values, behaviours and relationships {that} underpins the trust the public has in dentists".³⁹ Achieving this ideal has become further complicated by the arrival of social media and its impact on the dentist-patient relationship. This research into the perception of students on their online behaviours and its impact on their professionalism has revealed certain flashpoints between student perceptions of professionalism and the standards expected of them by regulators and

society alike. These flash points include: uploading of work-based photos or photos of self in uniform, photos involving alcohol, underestimating their accessibility online, and not routinely reviewing their digital footprint for content that may be deemed unprofessional from an employers or publics perspective. While students have an awareness of GDC social media guidelines, this study reveals a gap between their knowledge of the guidelines and its impact on values, attitudes and behaviour. If this situation is not resolved, then students will begin to appear in the GDC's Fitness to practice cases.²¹ More research will need to be undertaken to explore how we can inculcate e-professional norms, values and behaviours so we can prepare the 21st century dentist. For all these reasons, it is important that social media becomes a mainstream element of the education of healthcare students.⁴⁰

Declaration of interest

None declared

Acknowledgements

None

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